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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,621	11/18/2003	Woo Sok Kang	SI-0050	3265

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FLESHNER & KIM, LLP  
P.O. BOX 221200  
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EXAMINER
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PHUONG, DAI

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/714,621

Applicant(s)

KANG ET AL.

Examiner

Dai A. Phuong

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 9, 14 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Rosen et al. (Pub. No: 20040171400).

Regarding claim 1, Rosen et al. disclose a method for increasing use time of a battery of a mobile station (MS) of a communication system ([0100] to [0101]), comprising: identifying a plurality of mobile stations based on uses thereof; setting a slot cycle index value of each of the mobile stations according to the uses ([0100] to [0109]); and retrieving slots of a paging channel in each MS according to the slot cycle index value ([0100] to [0109]).

Regarding claim 9, Rosen et al. disclose a method for increasing use time of a battery of a mobile station (MS) of a communication system, comprising: identifying one or more uses of the MS based on a subscriber information of the MS in an upper system ([0100] to [0109]); deciding a retrieval period of a paging channel of the MS according to the uses, and transmitting information indicative of the retrieval period to the MS ([0100] to [0109]); setting the retrieval period in the MS; registering the set retrieval period in the upper system ([0100] to [0109]); and

retrieving the paging channel in the MS as the MS transitions from a sleep state to an active state in the registered retrieval period ([0100] to [0109]).

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 18, Rosen et al. disclose all the limitations in claim 14. Further, Rosen et al. disclose the method wherein setting slot cycle index values further comprises: retrieving the slots of the paging channel in each mobile station according to a corresponding slot cycle index value ([0100] to [0109]).

3. Claims 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Henry Jr. et al. (U.S. 6560453).

Regarding claim 7, Henry, Jr. et al. disclose a method for increasing use time of a battery of a mobile station (MS) of a communication system, comprising: setting a retrieval period of slots of a paging channel according to a use of the MS (col. 9, line 1 to col. 11, line 49); action: registering the retrieval period in an upper system (col. 9, line 1 to col. 11, line 49); and retrieving the slots of the paging channel as the MS transitions from a sleep state to an active state in the registered retrieval period (col. 9, line 1 to col. 11, line 49).

Regarding claim 8, this claim is rejected for the same reason as set forth in claim 3.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-6, 10-13, 15-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen et al. (Pub. No: 20040171400) in view of Henry, Jr. et al. (U.S. 6560453).

Regarding claim 2, Rosen et al. disclose all the limitations in claim 1. However, Rosen et al. do not disclose the method wherein the slot cycle index value is a positive number of 0 to 7.

In the same field of endeavor, Henry, Jr. et al. disclose the method wherein the slot cycle index value is a positive number of 0 to 7 (col. 1, line 60 to col. 2, line 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of Rosen et al. by specifically including disclose the method wherein the slot cycle index value is a positive number of 0 to 7, as taught by Henry, Jr. et al., the motivation being in order to decrease power consumption according incoming calls and provide a level of responsiveness to incoming calls that is tailored to their individual preference.

Regarding claim 3, Rosen et al. disclose all the limitations in claim 1. However, Rosen et al. do not disclose the method wherein said setting the slot cycle index value comprises: deciding the slot cycle index value in the MS; transmitting the slot cycle index value to an upper system; and storing the slot cycle index value into a slot cycle index field of a retrieval period information table for the MS in the upper system.

In the same field of endeavor, Henry, Jr. et al. disclose the method wherein said setting the slot cycle index value comprises: deciding the slot cycle index value in the MS (col. 9, line 1

to col. 11, line 49); transmitting the slot cycle index value to an upper system (col. 9, line 1 to col. 11, line 49); and storing the slot cycle index value into a slot cycle index field of a retrieval period information table for the MS in the upper system (col. 9, line 1 to col. 11, line 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of Rosen et al. by specifically including the method wherein said setting the slot cycle index value comprises: deciding the slot cycle index value in the MS; transmitting the slot cycle index value to an upper system; and storing the slot cycle index value into a slot cycle index field of a retrieval period information table for the MS in the upper system, as taught by Henry, Jr. et al., the motivation being in order to decrease power consumption according incoming calls and provide a level of responsiveness to incoming calls that is tailored to their individual preference.

Regarding claim 4, Rosen et al. disclose all the limitations in claim 1. Further, Rosen et al. disclose the method wherein said setting the slot cycle index value comprises: deciding the slot cycle index value in an upper system ([0100] to [0109]); transmitting the slot cycle index value to the MS ([0100] to [0109]).

However, Rosen et al. do not disclose the method reporting receipt of the slot cycle index value to a user of the MS; setting the received slot cycle index value when a message input from the user indicates changes of a retrieval period; reporting completion of setting the slot cycle index value to the upper system; and storing the slot cycle index value into a slot cycle index field of a retrieval period information table for the MS in the upper system.

In the same field of endeavor, Henry, Jr. et al. disclose the method reporting receipt of the slot cycle index value to a user of the MS; setting the received slot cycle index value when a message input from the user indicates changes of a retrieval period (col. 1, line 60 to col. 2, line 19); reporting completion of setting the slot cycle index value to the upper system (col. 1, line 60 to col. 2, line 19); and storing the slot cycle index value into a slot cycle index field of a retrieval period information table for the MS in the upper system. (col. 1, line 60 to col. 2, line 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of Rosen et al. by specifically including reporting receipt of the slot cycle index value to a user of the MS; setting the received slot cycle index value when a message input from the user indicates changes of a retrieval period; reporting completion of setting the slot cycle index value to the upper system; and storing the slot cycle index value into a slot cycle index field of a retrieval period information table for the MS in the upper system., as taught by Henry, Jr. et al., the motivation being in order to decrease power consumption according incoming calls and provide a level of responsiveness to incoming calls that is tailored to their individual preference.

Regarding claim 5, the combination of Rosen et al. and Henry, Jr. et al. disclose all the limitations in claim 1. Further, Rosen et al. disclose the method wherein the slot cycle index value is stored in a certain field of an order message, and then transmitting the message to the MS ([0100] to [0109]).

Regarding claim 6, Rosen et al. disclose all the limitations in claim 1. However, Rosen et al. do not disclose the method wherein said retrieving the slots of the paging channel comprises:

setting the slot cycle index value that is periodically transmitted to the MS from the upper system as a maximum value; comparing the slot cycle index value received from the upper system with the set slot cycle index value and choosing a smaller value; and retrieving the slots of the paging channel as the MS transitions from a sleep state to an active state according to the chosen slot cycle index value.

In the same field of endeavor, Henry, Jr. et al. disclose wherein said retrieving the slots of the paging channel comprises: setting the slot cycle index value that is periodically transmitted to the MS from the upper system as a maximum value (col. 9, line 1 to col. 11, line 49); comparing the slot cycle index value received from the upper system with the set slot cycle index value and choosing a smaller value (col. 9, line 1 to col. 11, line 49); and retrieving the slots of the paging channel as the MS transitions from a sleep state to an active state according to the chosen slot cycle index value (col. 9, line 1 to col. 11, line 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of Rosen et al. by specifically including wherein said retrieving the slots of the paging channel comprises: setting the slot cycle index value that is periodically transmitted to the MS from the upper system as a maximum value; comparing the slot cycle index value received from the upper system with the set slot cycle index value and choosing a smaller value; and retrieving the slots of the paging channel as the MS transitions from a sleep state to an active state according to the chosen slot cycle index value, as taught by Henry, Jr. et al., the motivation being in order to decrease power consumption according incoming calls and provide a level of responsiveness to incoming calls that is tailored to their individual preference.



Regarding claim 10, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 11, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 12, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 13, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 16, Rosen et al. disclose all the limitations in claim 1. However, Rosen et al. do not disclose the method wherein said identifying the mobile stations comprises setting retrieval periods of the slots of the paging channel to different ones based on said uses.

In the same field of endeavor, Henry, Jr. et al. disclose wherein said identifying the mobile stations comprises setting retrieval periods of the slots of the paging channel to different ones based on said uses (col. 9, line 1 to col. 11, line 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of Rosen et al. by specifically including wherein said identifying the mobile stations comprises setting retrieval periods of the slots of the paging channel to different ones based on said uses, as taught by Henry, Jr. et al., the motivation being in order to decrease power consumption according incoming calls and provide a level of responsiveness to incoming calls that is tailored to their individual preference.

Regarding claim 17, the combination of Rosen et al. and Henry, Jr. et al. disclose all the limitations in claim 1. Further, Henry, Jr. et al. disclose the method wherein the retrieval period of the slots of the paging channels is changed according to the slot cycle index value of each mobile station (col. 9, line 1 to col. 11, line 49).

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Regarding claim 19, this claim is rejected for the same reason as set forth in claim 5.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Wan (U.S. 6680920) power management system for a mobile station

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen M Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7503.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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AU: 2617  
Date: 01-30-2007

  
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